

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

CONDITIONAL MAJOR DRAFT PERMIT NO. F-06-0203

JIM SMITH CONTRACTING COMPANY, LLC

GRAND RIVERS, KENTUCKY 42045

APRIL 17, 2007

ROBERT L. WILLIAMS, REVIEWER

PLANT I.D. # 21-139-00002

AI # 38980

SOURCE DESCRIPTION:

Jim Smith Contracting Company, LLC is currently operating a batch hot-mix asphalt plant, a drum hot-mix asphalt plant, and a RAP unit at their Lake Paving facility in Grand Rivers, Kentucky. The drum hot-mix asphalt plant was added in 2006 at this same site due to the reliability problems of the batch plant in the past. The addition of the drum plant will ensure that a constant supply of hot-mix asphalt is available for both their road building projects, as well as for sale to local contractors. The drum-mix plant will eventually replace the batch-mix equipment.

The batch-mix plant and drum-mix plant are considered as one source as they are on adjacent sites and under common control. Their current permit was issued pursuant to State Regulation 401 KAR 52:030, Federally-enforceable permits for non-major sources as an initial construction / operating Conditional Major permit. The limits set forth in the permit restricted asphalt production of the batch plant to 323,000 tons/year, and the drum plant will be restricted to 467,000 tons/year. Both plants are regulated by State Regulation 401 KAR 60:005, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.90 (40 CFR 60, Subpart I) and 401 KAR 44:010, Standards for the management of used oil, which incorporates by reference 40 CFR 279, Subpart B.

The RAP unit, whose construction was authorized by the conditional major permit, F-06-023, is regulated by State Regulation 401 KAR 60:670, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 3 of 401 KAR 60:670) and State Regulation 401 KAR 63:010, Fugitive Emissions.

The source is currently operating under:

Permit F-06-023, signed December 28, 2006, which covers their batch and drum hot mix asphalt plants, a stationary RAP unit, and the haul road and yard area;

Minor Permit Revision for Addition of Portable RAP Plant

Jim Smith Contracting Company, LLC will be adding a portable RAP unit (Telesmith RP3036 Portable RAP Plant) to their existing asphalt plant operation. The addition will have a potential increase of PM / PM₁₀ emissions of 14.769 and 2.743 tons per year, respectively. This increase will not result in an exceedance of the permitted limit of 95 tons per year (twelve month consecutive period) for particulate matter emissions. Wet suppression will be utilized as the control of particulate emissions.

Although no additional specific requirements or conditions regarding the addition of the RAP unit were required, recordkeeping of the monthly RAP material processed by both RAP units, to include monthly hours of operation, was added to ensure that the maximum process rates listed for the units are not exceeded, which could result in exceeding the permitted particulate matter emission limit.

COMMENTS:

TYPE OF CONTROL AND EFFICIENCY

The particulate emissions from the rotary dryers are controlled by baghouses (control efficiency of 99.9%).

The particulate emissions from the loadouts, stockpiles, receiving hopper, crusher, screen, and conveyor associated with the RAP unit, and the aggregate handling and stockpile associated with the asphalt plant are controlled by a wet suppression method (control efficiency of 90%).

The emissions from haul roads (paved and unpaved) are controlled by a wet suppression method. The paved haul roads have a control efficiency of 90%, while the unpaved haul roads have a control efficiency of 70%.

The CO, NO_x, and SO₂ have no controls assigned to them.

EMISSION FACTORS AND THEIR SOURCE

AP-42, Chapter 11.1, Hot Mix Asphalt Plants, was used for the asphalt processing.

Emission Factors for the RAP Unit are the standard factors used for the limestone industry in the Commonwealth of Kentucky by the Division for Air Quality's Minerals Section.

APPLICABLE REGULATIONS

The Rotary Dryers associated with the asphalt plants are governed by **401 KAR 60:005**, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.90 (40 CFR 60, Subpart I) and **401 KAR 44:010**, Standards for the management of used oil, which incorporates by reference 40 CFR 279, Subpart B).

The aggregate handling, stockpiles, and haul roads and yard areas associated with the asphalt plants, along with the loadouts, stockpile, and receiving hopper associated with the RAP Unit are governed by **401 KAR 63:010**, Fugitive emissions.

COMMENTS: (CONTINUED)

APPLICABLE REGULATIONS (CONTINUED)

The RAP Crusher, RAP Screen, and RAP Conveyor and Transfer Points are governed by **401 KAR 60:670**, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 3 of 401 KAR 60:670).

PROPOSALS:

Jim Smith Contracting Company, LLC applied for a permit to construct and operate a batch hot mix asphalt plant on November 19, 1998. A permit (Permit No. S-99-041, ID # 072-2320-0002) was issued on May 11, 1999. This permit was renewed on May 28, 2004 with the issuance of Permit No. S-04-030 and is the current operating permit from the facility.

EMISSION AND OPERATING CAPS DESCRIPTION:

Jim Smith Contracting Company, LLC has requested voluntary permit emission limits of 95 tons per year (tpy) or less of carbon monoxide (CO) by limiting the annual production of asphalt from each plant. Compliance with this limitation will also limit the nitrogen oxides (NO_x), sulfur dioxide (SO₂), and volatile organic compounds (VOCs) from the source to 95 tons or less per year; and single and total hazardous air pollutants (HAPs) to less than 10 and 25 tons per year, respectively. Jim Smith Contracting Company, LLC will also limit fugitive particulate emissions by utilizing wet suppression, moisture carryover, and/or enclosures. Compliance with the permit limits will make the requirements of State Regulation 401 KAR 52:020, Title V permits not applicable to this source.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.